

BEST AVAILABLE COPY**IN THE CLAIMS**

Please substitute the following list of claims for the previous list of claims:

1. (Previously Presented) A battery comprising:
a substrate;
a cathode on the substrate, the cathode having a surface;
a cathode current collector comprising a plurality of conducting lines
that contact the surface of the cathode, the conducting lines having spacings
therebetween;
an electrolyte at least partially extending through the spacings
between the conducting lines of the cathode current collector to contact the cathode; and
an anode contacting the electrolyte.
2. (Previously Presented) A battery according to claim 1 wherein the
cathode current collector is between the electrolyte and the cathode.
3. (Original) A battery according to claim 1 wherein the cathode current
collector is absent a non-reactive metal containing material.
4. (Currently Amended) A battery according to claim 1 wherein the
cathode current collector comprises aluminum, cobalt, copper, nickel, titanium, tantalum,
vanadium, zirconium, indium-tin oxide, and alloys and compounds mixtures thereof.
5. (Original) A battery according to claim 1 wherein the conducting lines
comprise elongated prongs extending from a base prong.
6. (Original) A battery according to claim 1 wherein the conducting lines
contact less than 80% of the area of the surface of the cathode.

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7. (Original) A battery according to claim 1 wherein the substrate comprises mica.

8. (Original) A battery according to claim 1 wherein the cathode comprises lithium cobalt oxide.

9. (Original) A battery according to claim 1 comprising an anode current collector contacting the anode.

10-19 (Cancelled)

20. (Previously Presented) A thin film battery comprising:
a substrate comprising a dielectric material;
a cathode layer having a surface adhering to the substrate and an opposing surface;
a cathode current collector layer comprising one or more conducting lines adhering to the opposing surface of the cathode layer, the conducting lines having spacings therebetween or thereabout;
an anode layer facing the opposing surface of the cathode layer and the cathode current collector layer; and
an electrolyte layer between the cathode current collector layer, cathode layer and anode layer, the electrolyte layer at least partially extending through the spacings between or about the one or more conducting lines of the cathode current collector layer to contact the opposing surface of the cathode layer.

21. (Cancelled)

22. (Currently Amended) A battery according to claim 20 wherein the cathode current collector comprises aluminum, cobalt, copper, nickel, titanium, tantalum, vanadium, zirconium, indium-tin oxide, and alloys and compounds mixtures thereof.

23. (Previously Presented) A battery according to claim 20 wherein the conducting lines comprise elongated prongs extending from a base prong.

24. (Previously Presented) A battery according to claim 20 wherein the substrate comprises mica.

25. (Previously Presented) A battery according to claim 24 wherein the cathode comprises lithium cobalt oxide.

26. (Previously Presented) A battery comprising:
a substrate;
a cathode having a surface on the substrate and an opposing surface;
a cathode current collector comprising a pattern of conducting lines contacting the opposing surface of the cathode, the conducting lines having spacings therebetween;
an anode; and
an electrolyte between the cathode and anode, the electrolyte at least partially extending through the spacings between the conducting lines.

27. (Previously Presented) A battery according to claim 26 wherein the pattern of conducting lines comprise one or more of meandering lines, circular lines, random lines, radial lines, horizontal lines, vertical lines, diagonal lines and arcuate lines.

28. (Cancelled)

29. (Previously Presented) A battery according to claim 26 wherein the substrate comprises mica.

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30. (Previously Presented) A battery according to claim 26 wherein the cathode comprises lithium cobalt oxide.

31. (Previously Presented) A battery comprising:
a substrate;
a cathode on the substrate, the cathode having a surface;
a cathode current collector contacting the surface of the cathode, the cathode current collector comprising conducting lines having a plurality of elongated prongs extending outwardly from a base prong, the elongated prongs having spacings therebetween;
an electrolyte at least partially extending through the spacings between the elongated prongs of the cathode current collector to contact the cathode; and
an anode contacting the electrolyte.

32. (Previously Presented) A battery according to claim 31 wherein the substrate comprises mica.

33. (Previously Presented) A battery according to claim 31 wherein the cathode comprises lithium cobalt oxide.

34. (Previously Presented) A battery according to claim 31 wherein the electrolyte comprises lithium phosphorus oxynitride.

35. (Previously Presented) A battery according to claim 31 wherein the cathode current collector comprises one or more of copper, aluminum and indium tin oxide.

36. (Previously Presented) A battery comprising:
a substrate;
a cathode comprising lithium cobalt oxide, the cathode having a surface on the substrate and an opposing surface;
a cathode current collector contacting the opposing surface of the cathode, the cathode current collector comprising conducting lines having a plurality of elongated prongs extending outwardly from a base prong, the elongated prongs having spacings therebetween, the cathode current collector comprising one or more of copper, aluminum, and indium tin oxide;
an electrolyte comprising lithium phosphorus oxynitride at least partially extending through the spacings between the elongated prongs of the cathode current collector to contact the opposing surface of the cathode; and
an anode facing the opposing surface of the cathode and contacting the electrolyte.

37. (Previously Presented) A battery according to claim 36 wherein the substrate comprises mica.

38. (Previously Presented) A battery comprising:
a substrate;
a cathode having a surface on the substrate and an opposing surface;
a cathode current collector contacting the opposing surface of the cathode, the cathode current collector comprising a pattern of conductors having a plurality of shapes with spacings therebetween, the plurality of shapes comprising one or more different shapes;
an electrolyte at least partially extending through the spacings between the shapes of the pattern of conductors of the cathode current collector to contact the opposing surface of the cathode; and
an anode contacting the electrolyte.

39. (Previously Presented) A battery according to claim 38 wherein the substrate comprises mica.

40. (Previously Presented) A battery according to claim 38 wherein the cathode comprises lithium cobalt oxide.

41. (Previously Presented) A battery according to claim 38 wherein the electrolyte comprises lithium phosphorus oxynitride.

42. (Previously Presented) A battery according to claim 38 wherein the cathode current collector comprises one or more of copper, aluminum and indium tin oxide.

43. (Previously Presented) A battery comprising:
a substrate;
a cathode having a surface on the substrate and an opposing surface;
a cathode current collector contacting the opposing surface of the cathode, the cathode current collector comprising a layer having spacings therein;
an electrolyte at least partially extending through the spacings in the cathode current collector layer to contact the opposing surface of the cathode; and
an anode contacting the electrolyte.

44. (Previously Presented) A battery according to claim 43 wherein the layer is continuous.

45. (Previously Presented) A battery according to claim 43 wherein the substrate comprises mica.

46. (Previously Presented) A battery according to claim 43 wherein the cathode comprises lithium cobalt oxide.

47. (Previously Presented) A battery according to claim 43 wherein the electrolyte comprises lithium phosphorus oxynitride.

48. (Previously Presented) A battery according to claim 43 wherein the cathode current collector comprises one or more of copper, aluminum and indium tin oxide.

49. (Previously Presented) A battery comprising:
a substrate;
a cathode having a surface on the substrate and an opposing surface;
a cathode current collector contacting the opposing surface of the cathode, the cathode current collector comprising a single continuous conducting line having portions with spacings therebetween;
an electrolyte at least partially extending through the spacings between portions of the conducting line of the cathode current collector to contact the opposing surface of the cathode; and
an anode contacting the electrolyte.

50. (Previously Presented) A battery according to claim 49 wherein the conducting line comprises concentric arcuate portions.

51. (Previously Presented) A battery according to claim 49 wherein the cathode current collector covers substantially the entire cathode opposing surface.

52. (Previously Presented) A battery according to claim 49 wherein the substrate comprises mica.

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53. (Previously Presented) A battery according to claim 49 wherein the cathode comprises lithium cobalt oxide.

54. (Previously Presented) A battery according to claim 49 wherein the electrolyte comprises lithium phosphorus oxynitride.

55. (Previously Presented) A battery according to claim 49 wherein the cathode current collector comprises one or more of copper, aluminum and indium tin oxide.

56. (New) A battery according to claim 1 wherein the plurality of conducting lines comprise one or more of meandering lines, circular lines, random lines, radial lines, horizontal lines, vertical lines, diagonal lines and arcuate lines.

57. (New) A battery according to claim 27 wherein the conducting lines comprise one or more of meandering lines, circular lines, random lines, radial lines, horizontal lines, vertical lines, diagonal lines and arcuate lines.

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